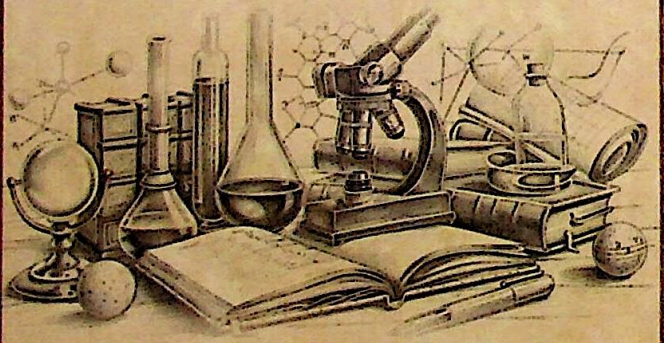
Glimpses of

भारतीय विज्ञान



By

Prof. S. Sudarsana Sarma

Director

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ASHOK SINGHAL VEDIC RESEARCH INSTITUTE
(Sponsored by Badri Bhagat Jhandewala Temple Society, Delhi)
GURUGRAM
2024

First published in 2024
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Printed and published by:
Ashok Singhal Vedic Research Institute
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Block-B, Sector 56, Gurugram - 122011
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Printed by:
Shailee Creations LLP, New Delhi
Phone: 98713 94811
e-mail: creations.shailee@gmail.com

ASHOK SINGHAL VEDIC RESEARCH INSTITUTE

Message

Dear Scholars,

Divangat Ashok Singhal-ji was a postgraduate of science from BHU. He was fond of scientific research, especially based on Veda which is the source of knowledge that benefits the society. His vision to establish an Institution for Vedic Research work is translated into action by VHP. The Ashok Singhal Vedic Research Institute came into existence a year and half ago and started functioning, through in-house research work.

The type of work intended to be carried out is perceptibly showcased in nutshell in the booklet "Glimpses of भारतीय विज्ञान" in your hand. It is the miniature form. We wish to encourage the enthusiastic intelligentsia in the direction of this type of Vedic-based research work, extensively.

We have launched a scheme of outsourcing the research work to the competent and interested researchers in different institutions or retired and are contemplating upon several other measures to expand our activity.

We welcome your ideas and proposals proactive towards our goal. Come on! Let us join hands and stride!!

वेदजिज्ञासु

Shri Dinesh Chandra

Chairman

Karkaṭī
(कर्कटी)

SAGES like Vālmīki and Vyāsa who are very kind to the mankind had deposited their deep knowledge of the Vedas in their writings and passed it on to us. Thus, the epics and other scriptures contain many topics from the extinct branches of Vedas.

The *Yoga-Vāsiṣṭha* is one of such magnificent scriptures believed to be composed by Vālmīki. It is composed with 32,000 (29,000?) verses divided into 6 chapters. The major portion of the treatise is in the forms of doubt and clarification projected by Shri Rāma and his guru Vasiṣṭha respectively. (As such, some feel that it was authored by Vasiṣṭha). The 69th Sarga of the 3rd Chapter called Utpatti Prakaraṇa supplies an interesting episode of a demoness Karkaṭī or Karkaṭikā who later turned into the "Virus" called "Sūci" or "Visūci".

Karkaṭī was a demoness with huge, black and terrifying body. She was living in the lands on the northern side of Himalayas[1]. She was always hungry and was unable to get sufficient food. She undertook severe penance (तपस्या) aiming at Brahma (ब्रह्म), the creator of the worlds. After thousand years of penance, the deity appeared before her and permitted her to ask for the boon[2]. She began to think: "I shall ask for a shape of an invisible metal (iron) needle to suck the life of the beings[3]. I shall eat away the entire world. The happiness I get when my hunger is quenched is immense."[4] Having thought like this, she ventilated her desire to

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1 हिमाद्रेरुत्तरे पार्श्वे कर्कटी नाम राक्षसी। – III-69-13

2 अथ वर्षसहस्रेण तां पितामह आययौ। – III-69-1

3 अनायसी चायसी च स्यामहं जीवसूचिका। – III-69-3

4 यथाभिमतमेतेन ग्रसेयं सकलं जगत्। क्रमेण क्षुद्विनाशाय क्षुद्विनाशः परं सुखम्।। – III-69-5

Brahma who accepted immediately. "All right, as you wish, you will assume an invisible needle shape and suck the lives of the beings entering into their bodies through air. Hereafter you will be called as 'Sūcikā' (सूचिका) or 'Viṣūcikā' (विषूचिका) by the people."[5] She is also called Anyāyabādhikā (अन्यायबाधिका)[6]. While granting the boon Brahma laid down certain conditions. "You will torture and consume only those who are unhygienic in eating (washing feet and hands, cleanliness, etc.), who are impure in thoughts and deeds, who are stupid and who take the side of the bad people, who live in unwholesome places and who by nature are wicked."[7]

"Through the air the virus enters the body and damages heart, spleen and other parts of the body. It consumes anybody – the meritorious (good) (धार्मिक) or meritless (bad) (अधार्मिक) – without discrimination."[8]

For the rescue of the virtuous people, Lord Brahma suggested chanting of a Mantra:

> "ओं ह्रीं ह्रां रीं रां विष्णुशक्तये नमः। ओं नमो भगवति विष्णुशक्तिमेनां, ओं हर हर नय नय पच पच मथ मथ, उत्सादय दूरे कुरु स्वाहा। हिमवन्तं गच्छ जीव सः सः सः चन्द्रमण्डलगतोऽसि स्वाहा।"[9]

The practitioner should write the Mantra on his left palm and wipe the infected person with it, while uttering the Mantra. While doing

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[5] एवमस्त्विति तामुक्त्वा, पुनराह पितामहः। सूचिका सोपसर्गा त्वं भविष्यसि विषूचिका।। सूक्ष्मया मायया सर्वलोकहिंसां करिष्यसि। – III-69-9/10

[6] विषूचिकाभिधाना सा नाम्नाप्यन्यायबाधिका। – III-69-14a

[7] दुर्भोजना दुरारम्भा मूर्खा दुस्स्थितयश्च ये। दुर्देशवासिनो दुष्टास्तेषां हिंसां करिष्यसि।। – III-69-10

[8] प्रविश्याहृदयं प्राणैः पद्मप्लीहादिबन्धनात्। वातलेखात्मिका व्याधिर्भविष्यसि विषूचिका। सगुणं विगुणञ्चैव जनमासादयिष्यसि।। – III-69-11, 12

[9] Yes, I salute the power of Viṣṇu. Please snatch and take away the virus. Roast, churn and throw off the virus. I offer it to you. O virus, go to Himālaya. That living being (patient) is on the moon. I offer you.

so, he should imagine the demoness fleeing towards Himālaya, crying loudly; having been thrashed by the Mantra-pestle. Later, he should imagine the patient on the moon, full of nectar; having got rid of the disease.[10] It is important that the practitioner of the Mantra must be pure (शुचि) by all means (by body, thought and deed) and attentive. Only then he can dispel the virus.[11]

Leads

- The birthplace of the virus is the northern side of Himālayas.
- It is needle-shaped or possesses an organ like a sting.
- It enters into the body through nose or mouth, using air as a vehicle.
- Its original colour is black but can be transparent or sky-blue.
- Its strongholds are filthy areas/people/thoughts/metals especially iron.
- Righteousness plus hygiene can be the shield.
- It takes refuge in cold places and flourishes.
- It cannot live in hot zones or where righteousness prevails.
- It cannot withstand the radiation generated by the chanting of Mantra.
- It cannot withstand the sounds of certain letters.

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[10] इति मन्त्री महामन्त्रं न्यस्य वामकरोदरे। मार्जयेदातुराकारं तेन हस्तेन संयुतः।।
हिमशैलाभिमुख्येन विद्रुतां तां विचिन्तयेत्। कर्कटीं कर्कशाक्रन्दां मन्त्रमुद्गरमर्दिताम्।।
आतुरं चिन्तयेच्चन्द्रे रसायनहृदि स्थितम्। अजरामरणं युक्तं मुक्तं सर्वाधिविभ्रमैः।।
– III-69-14 to 16

[11] साधको हि शुचिर्भूत्वा स्वाचान्तस्सुसमाहितः। क्रमेणानेन सकलां प्रोच्छिनत्ति विषूचिकाम्।।
– III-69-17

Jvarahara-Stotram
(ज्वरहरस्तोत्रम्)

The 63rd Sarga of 10th chapter (Daśama Skandha) in *Śrīmadbhāgavata* is popularly known as Jvarahara-Stotram, in which an invocation is made to the Supreme Lord for relief from viral fever. The context is interesting. Once, Lord Śiva, in order to save Bāṇāsura (बाणासुर) to whom he granted refuge had to fight with Śrī-Kṛṣṇa[1]. A fierce war took place between the armies of Bāṇāsura and Kṛṣṇa followed by their supportive kings. When the armies of Bāṇāsura along with Pramatha Gaṇas were defeated and he (Bāṇāsura) was about to be killed by Kṛṣṇa, Śiva himself entered the battlefield. The ferocious fight between them was stunning to all the beings. Ultimately, Śiva created "Jvara" ज्वर (virus) and launched against Kṛṣṇa. It has three heads and three legs with a frightening body. It rushed towards Kṛṣṇa as if ready to burn all the ten directions (दिक्)[2] "In return Kṛṣṇa (Nārāyaṇa) too launched another Jvara against it[3]. Both fought. Finally, Śiva Jvara could not withstand the power of Nārāyaṇa Jvara. Yelling aloud took refuge at the feet of Kṛṣṇa and invoked him[4]: "O Lord, I bow to you the omnipotent, dictator of all gods, omniscient and embodiment of pure wisdom. You are the neutrally peaceful Para-Brahma, the creator of the Universes, described by the Vedas. The union of (adverse) time which is due to the fate that forms from the deeds of beings, matters/elements,

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1 बाणार्थे भगवान् रुद्रः ससुतः प्रमथैर्वृतः। आरुह्य नन्दिवृषभं युयुधे रामकृष्णयोः।।6।।

2 विद्राविते भूतगणे ज्वरस्तु त्रिशिरास्त्रिपात्। महादेव प्रयुक्तोऽसौ घोररूपो विभीषणः।। अभ्यधावत दाशार्हं दहन्निव दिशो दश।।22।।

3 अथ नारायणो देवस्तं दृष्ट्वा व्यसृजज्ज्वरम्।।23।।

4 माहेश्वरो वैष्णवश्च युयुधाते ज्वरावुभौ। माहेश्वरः समाक्रन्दत् वैष्णवेन बलार्दितः।।24।। अलब्धाऽभयमन्यत्र भीतो माहेश्वरो ज्वरः। शरणार्थी हृषीकेशं तुष्टाव प्रयताञ्जलिः।।25।।

life, the manifestations, etc. is the body. The birth-deed cycle is never-ending like that of the seed and sprout. The cycle of deed and body कर्म-जन्म is a never-ending process. In other words, "you do something since you are alive; you take birth since you have done something, to enjoy the fruit/result of it. In your case that is forbidden (it comes to a halt). With your effortless incarnations you maintain the gods and ethical people who follow Dharma and kill those people who deviate from the path of righteousness and become violent. Your incarnations are only to clear the additional weight of the earth. I am scorched up by the intolerable radiation of your Jvara (Virus) which is peaceful (cold) and at the same time terribly fierce (hot). Its heat continues to the beings as long they do not take refuge at your feet, due to worldly desires."[5] Śrī-Kṛṣṇa replied: "O Three-headed Javara (Virus)! I am pleased. Don't be afraid of my (Nārāyaṇa) Jvara (Virus). I save you on the condition that you should not trouble who meditate upon our conversation."[6] Then the Jvara bowed to Nārāyaṇa (Kṛṣṇa) and went away.

The story is not so important to us; but the facts related to the viral treatment. Even now, there is a custom of reciting this invocation स्तोत्रम्, among the south Indian Paṇḍits, to get relief from viral fevers.

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5 नमामि त्वाऽनन्तशक्तिं परेशं सर्वात्मानं केवलं ज्ञप्तिमात्रम्।
विश्वोत्पत्तिस्थानं संरोधहेतुं यत्तद्ब्रह्म ब्रह्मलिङ्गं प्रशान्तम्।। 26 ।।

कालो दैवं कर्मजीवस्स्वभावो द्रव्यं क्षेत्रं प्राण आत्मा विकारः।
तत्सङ्घातो बीजरोहप्रवाहस्त्वन्मायैषा तन्निषेधं प्रपद्ये।। 27 ।।

नानाभावैर्लीलयैवोपपन्नैः दैवान् साधून् लोकसेतून् बिभर्षि।
हंस्युन्मार्गान् हिंसया वर्तमानान् जन्मैतत्ते भारहाराय भूमेः।। 28 ।।

तप्तोऽहं ते तेजसा दुस्सहेन शान्तोग्रेणात्युल्बणेन ज्वरेण।
तावत्तापो देहिनां तेऽङ्घ्रिमूलं नो सेवेरन् यावदाशानुबद्धाः।। 29 ।।

6 त्रिशिरस्ते प्रसन्नोऽहं व्येतु ते मज्ज्वराद्भयम्।
यो नौ स्मरति संवादं तस्य त्वन्न भवेद्भयम्।। 30।।

Leads

- The Virus that causes fever is three-headed and three-footed.
- It generates heat in the body.
- The virus subsides only by a more powerful Virus (produced by more heat-generating and at the same time immediately severe cold-generating process. Rather, a two-pronged treatment of applying ice outwardly and generating heat inside by medicines!).

The Features of Earthquakes

(According to Atharvaveda Pariśiṣṭa)

(भूकम्पलक्षणानि)

THE appendix of *Atharvaveda*, "Atharvavedapariśiṣṭa" contains a chapter dealing with the earthquakes. This chapter called "Bhūmikampalakṣaṇam" gives an account of various earthquakes and their features. The earthquakes are classified into four viz., Āgneya, Vāyavya, Āmba and Aindra, basing on their factors – Fire, Wind, Water and Indra.

Āgneya

1. If an earthquake recurs within a week, it is due to Agni, the fire. The sun appears reddish, the moon turns to copper-colour, and not only the east but also all the other 3 directions become orange-coloured as if at the time of sunrise. Yellowish thing can be observed on the birds and animals. The results of this type of tremor are, wars between rulers with loss of lives, the earth becomes wet with blood and flesh, draught hits strongly, fire-accidents occur and difference of opinion among the rulers happens frequently. The seer Śaunaka advises to dispense with gold and such other wealth and to take up the business of paddy.

Vāyavya

2. During the earthquake of Vāyavya there will be fierce wind like tornado, dust is scattered in all directions and sand storms in. It is better to take shelter under covered area. Great walls or deep ditches will be helpful. People are advised not to go out. Fierce battles will occur and the rulers fight tooth and nail. The earth will drink/absorb the blood and flesh of

thousands of warriors. For one month or at least for 20 days there will not a drop of rain. After a lapse of 2 months, there will be heavy rain and plenty of water. The bad will become the worse. In case of the wounded, chances of recovery will be bleak.

Āpaska

3. In case of the earthquakes due to water, heavy clouds pour in from all the quarters. They appear in the shapes of gigantic water creatures like crocodile, tortoise as if swallowing sun and moon, in the sky. Agriculture in hilly areas, deserts and meadows will yield reasonably. In other areas the crops will perish. Water-based flowers, roots and fruits yield in heavily. So also the water-based creatures will flourish.

Aindra

4. In case of earthquakes due to Indra, heavy and thick clouds like huge mountains in dark black colour like soot gather in, on looking at which people get frightened and pour in water heavily and speedily. Rainbow appears. There will be innumerable lightning and loud sounds of thunders. Following this earthquake, there will be convenient seasonal rains, plenty of food, peace, health and happiness to the people.

   Among the four, Aindra is admirable. It is recommended to perform atonement following the earthquakes. Also in case of Aindra, performing the sacrifice in favour of Inda and chanting (*Japa*) of Mantras of Indra, is advised for better results.

Number of Suns
(तैत्तिरीयारण्यकम् I-7)

आरोगो भ्राजः पटरः पतङ्गः । स्वर्णरो ज्योतिषीमान् विभासः ।[1] There are 7 suns called Āroga, Bhrāja, Paṭara, Pataṅga, Svarṇara, Jyotiṣīmān and Vibhāsa. They shine in the sky. They change one after the other, according to the seasons. They energize the creatures by arranging food, etc. for the creatures, creating rain and other seasons to look after their comfort. Further they shine to illumine the world only up to a comfortable level. Also there is another sun, the 8th one, called Kaśyapa. He never leaves the Golden-mountain "Meru"[2] and illumines the same. The word "Paśyaka" (meaning the "Seer") became "Kaśyapa". He is named so, because he observes all (everything) very sharply.

The sage Vaiśampāyana (वैशम्पायन) says that depending upon the seasons in different directions, there are thousands or innumerable number of suns.[3]

1. How the suns shine?

In order to illumine the earth, all the 7 suns derive light from Kaśyapa. In this process, Soma (moon?) helps them. The goldsmith uses leather cyst to increase the flame to heat the gold in fire. Similarly, Soma pumps warmth and light and brightens the suns.[4]

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1 T.A. I-7-1

2 There are 7 continents on the earth and Jambūdvīpa is in the central position. The mythological golden mountain "Meru" stands at the centre point of Jambūdvīpa. *Viṣṇu Purāṇa* 2-2. See also Devī Bhāgavata, Skandha 8.

3 एतयैवावृता सहस्रसूर्यताया इति वैशम्पायनः ।

4 ते अस्मै सर्वे कश्यपाज्ज्योतिर्लभन्ते, तान्सोमःकश्यादधिनिर्धमति... ।

There are 7 openings in the head. In view of some Ācāryas, they are the 7 suns that make the beings live. They meditate/worship the 7 openings as 7 suns with 7 names, viz., Mahat, Ahaṅkāra and 5 Tanmātras. Some other Ācāryas opine that these 7 are Manas, Buddhi and the 5 sense organs. In view of Vidyāraṇya, the 7 openings are not the suns but symbolically they are worshipped.[5] There was a sage Pañcakarṇa (पञ्चकर्ण) son of Vatsa (वत्स). He says: "I saw all the 7 suns moving." He is seconded by another sage Saptakarṇa (सप्तकर्ण) son of Plakṣa (प्लक्ष). They both say that only the 1st sun is visible to the human beings. They confess that they only hear of the 8th Sun Kaśyapa from Veda but could not see him because they could not go to his abode, i.e. Mahā Meru (महामेरु).[6]

The sage Prāṇatrāta (प्राणत्रात) son of Garga (गर्ग) claims that he saw the 8th sun Kaśyapa, revolving on the mountain Mahā-Meru. He advises; "You can also see him adopting the right path to approach Mahā-Meru. It is for certain that he never leaves the mountain.[7]

2. The focuses of the suns

The movement of the 1st sun Āroga is well known to the human beings. The suns Bhrāja, Patara and Pataṅga stay below the sphere of Mahā-Meru and illumine the beings (worlds) below, with their rays going only downwards.

The suns Svarṇara, Jyotiṣīmān and Vibhāsa stay above the sphere of Mahā-Meru. They heat/illumine the world above the Mahā-Meru with their rays going upwards.

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[5] प्राणो जीवानीन्द्रियजीवानि, सप्तशीर्षण्याः प्राणाः, .. सूर्या इत्याचार्याः।

[6] अपश्यमहमेतान्सप्तसूर्यानिति, पञ्चकर्णो वात्स्यायनः, सप्तकर्णश्च प्लाक्षिः ... न हि शेकुमिव महामेरुं गन्तुम्।

[7] अपश्यमहमेतत्सूर्यमण्डलं परिवर्तमानम्, गार्ग्यः प्राणत्रातः...।

Lead

Perhaps, Prāṇatrāta could have followed the path between these 2 sets of suns to approach Mahā-Meru. The 1st set of 3 suns heats-up only the world below the Meru and the 2nd set of 3 suns above the Meru. So if Sādhaka travels between, the sets of suns, that path is likely to be cool and congenial to reach Mahā-Meru. The number of suns is innumerable as it was stated "सूर्यमण्डलान्यष्टात ऊर्ध्वम्".

Origin of Time
(T.A. I-8)

THERE was nothing.[1] The Supreme Soul desired to create the Universe. Then Hiraṇyagarbha, the self-born arose.[2] He first created the water[3] and ejaculated his energy (semen?) into it. That became a golden egg blissful as crores of suns.[4] Earlier, the water had no tendency to solidify. The time taken by the semen to solidify along with the water and become an egg is "year".[5] Before that there was no "year".[6] In other words, the forming time of "Brahmāṇḍa" (ब्रह्माण्ड) is the year.

When once the year is created, by dividing its particles, i.e., the lower units like Ayana, to Tṛṭi came into existence.[7] By adding the years the upper units like "Parivatsara" to Kalpa are created.[8]

We all experience the time call it seconds, minutes, hours, etc. How it becomes possible. The Veda explains: "The sun sends the rays on all the objects – from the minute-most to the biggest and gets feedback. These rays bring in change in everything. For example, the seed, when sowed, sprouts. Later it gets a trunk, followed by leaves, branches, flowers and fruits. Thus, the rays,

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1 नासदासीन्नोसदासीत् ... । – R.V. X-129-1

2 हिरण्यगर्भस्समवर्तताग्रे भूतस्य जातःपतिरेक आसीत्... । – R.V. X-121-1

3 आपो वा इदमग्रे सलिलमासीत्... ।

4 सोभिध्याय शरीरात्स्वात्सिसृक्षुर्विवाधाः प्रजाः ।
अप एव ससर्जादौ तासु वीर्यमवासृजत् ।।
तदण्डमभवद्धैमं कोटिसूर्यसमप्रभम् । – Manu. I-8, 9

5 काला अप्सु निविशन्ते... । – T.A. I-8-1 and

6 तद्यद्रेत आसीत्स संवत्सरोऽभवत्न ह पुरा ततस्संवत्सर आस । – B.U.

7 अर्धमासामुहूर्ताः । निमेषास्तुटिभिस्सह । – T.A – 01.08.01

8 संवत्सरोसि परिवत्सरोसि,.... ।

creating the time generate the changes or stages. In other words, the period taken for occurrence of a particular change/stage is time. These various changes or stages are based on the time and the time nothing but the rays.[9]

The Veda divides the time into two – Samārūḍha (समारूढ) and Adhisattva (अधिसत्त्व). That which is experienced by all of us in the form of year, with its downward divisions like half years, seasons (Ṛtus) months, fortnights, weeks, dates, days, nights, Yāmas, Horās, Muhūrttas, Nimeṣas, Truṭis, etc. and upward divisions like Yuga, Mahāyuga, Kalpa is Samārūḍha. The one which cannot be experienced by us, undivided (अखण्ड) and the cause of Samārūḍha is called Adhisattva. It is eternal, omnipresent and omnipotent. It is nothing but Paramātman.[10]

Lead

The time flows like the water. (One who manages thrift of water saves up longevity.) The water is recycled. The rainy water is drawn by rays, gets stored in the sun, recycled and showered back by Parjanya. This process goes on unending. Similarly, the time too flows, evaporates, gets recycled and comes back. That is why the chain of Kṛta to Kali Yuga moves forever.

The longevity seems to be expandable. See, already the time is equated with the flowing water! The Mantra नदीव प्रभवात्काचित्। अक्षय्यात्स्यन्दते यथा। तां नद्योभिसमायन्ति। सोरुस्सती न निवर्तते।। (TA I-2-1, 2) suggests that even though the river, at its birthplace emerges as a small stream, becomes vast with the joining of tributaries. Perhaps, the being born with a granted life span, can expand it by

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9 सूर्यो मरीचिमादत्ते। सर्वस्माद्भुवनादधि। तस्याःपाकविशेषेण। स्मृतं कालविशेषणम्।। – TA I-2-1

10 अणुभिश्च महद्भिश्च। समारूढःप्रदृश्यते। संवत्सरः प्रत्यक्षेण। नाधिसत्त्वः प्रदृश्यते।। – TA I-2-3

its Dhārmic actions, disciplined Dhārmic lifestyle, etc. supported by food-restrictions, fasting and practice of Yoga.

Further, there is not such categorization as good time and bad time. When a river flows, the water is not stationary; still, we call it Gaṅgā and Godāvarī. We do not differentiate it as good Gaṅgā-Godāvarī and bad Gaṅgā-Godāvarī. Similarly, when the time drifts as seconds, minutes, days, months, years, etc. we cannot differentiate some time as good and some other as bad. Time is one and the same. Seconds, etc. are artificially created for convenience (व्यवहारार्थम्).

Prāṇa-1
(प्राण: 1)

LIFE! What is it? It is the most dearest[1] of all!! Okay, when it enters anybody, the being comes into existence; in other words, the being becomes a being. Wherefrom the life is born? Answer is found in *Praśnopaniṣat* (प्रश्नोपनिषत्).

Once upon a time there was a sage called Paippalāda (पैप्पलाद). He was not only a great sage but also a great teacher. At a point of time he had five very wise seekers in a batch of students. *Praśnopaniṣat* is nothing but the questions they put and the answers given by Paippalāda.

After serving the Guru for several years pursuing study and research, one day one of the 5 distinguished students – Kośala (कोशल) (who perhaps hails from Kośala country) who was born in the dynasty of Āśvalāyana (आश्वलायन) was permitted to question and he put 6 questions. The dialogue that went on between the taught and the teacher is as follows:

Question 1: "What is the source of Prāṇa (प्राण)?"

Question 2: "How it enters into the body?"

Question 3: "How it manifests in the body?"

Question 4: "How it gets out of the body?"

Question 5: "Wherefrom it gets external support?"

Question 6: "How it is linked with the internal world."[2]

Answer 1: "Ātmā (आत्मा) is the source".[3]

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1 Like the Shakespearean usage "The most unkindest cut of all" (Julius Caesar).

2 भगवन् कुत एष प्राणो जायते, कथमायात्यस्मिन् शरीरे आत्मानं वा प्रविभज्य .... – *Praśnopaniṣat* 3-1

3 आत्मन एष प्राणो जायतेष। – P.U 3-3

Answer 2: "It enters the body through the mind". In your previous birth(s) your mind was the cause of your Karma (कर्म) actions – sinful (पाप) or meritorious (पुण्य). You have to enjoy the result of your Karma. As such the mind makes your life enter into your body[4]. [This answer correlates with the 5/6th answer. Even after death, the Jīva (Prāṇa) survives with his organs and mind. The mind inspires the Prāṇa to take up (enter into) a particular body according to Karma automatically. Prāṇa does not have a choice.]

Answer 3: Prāṇa diversifies itself into 5 and controls the other 4 viz., Apāna, Vyāna, Udāna and Samāna, like a King allotting provinces to the Knights. Prāṇa (at heart) himself controls the upper organs like eyes, ears, etc. The openings of stools and urine are covered by Apāna. In between, there is Samāna at umbilicus (navel) which balances the body and which is fire-oriented. It has 7 different flames. It digests the food and drink and distributes the energy equally. Therefore it is called Samāna.

Vyāna spreads the entire body. Listen.

There are 101 main veins in the heart. Each one has 100 branches of veins. (101 × 100 = 10,100) Again each of the 10,100 branch-veins has 72,000 sub-veins. (10,100 × 72,000 = 72,72,00,000. The grand total is 101+10,100+72,72,00,000 = 72,72,10,201). All these arteries manage the life throughout the body and they are conducted by the life called Vyāna.[5]

The Guru's explanation is beyond our imagination. ***This is a lead to our leading Cardiologists.***

Let us discuss a little bit, before we take up the 4th answer of Sage Paippalāda.

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[4] मनो कृतेनायात्यस्मिञ्छरीरे। – P.U. 3-3

[5] पायूपस्थेपानं चक्षुः श्रोत्रे मुखनासिकाभ्यां प्राणः स्वयं प्रतिष्ठते मध्ये तु समानः। ..... अत्रैतदेकशतं नाडीनां तासां शतं शतमेकैकस्यां द्वासप्ततिर्द्वासप्ततिः प्रतिशाखानाडी-सहस्राणि भवन्त्यासु व्यानश्चरति। – P.U. 3/5-6

We know that the life/Prāṇa is one. But the Vedic tradition says that there are 5 lives/Prāṇas; viz., Prāṇa, Apāna (अपान), Vyāna (व्यान), Udāna (उदान) and Samāna (समान). Fine! Amarsiṁha (अमरसिंह) is the writer of the first dictionary of classical literature. The dictionary *Amarakośa* (अमरकोश) goes on to explain that the breath which is in the heart, is called Prāṇa; the one in the anus is Apāna; the one in the navel is Samāna; the one in the throat is Udāna and the one which occupies the entire body is called Vyāna.[6]

But the Veda in a context declares that there are 10 Prāṇas! One each in the 9 openings and the 10th one is the umbilicus[7]. Again, we approach *Amarakośa* that provides a vivid sketch of the subject. There are 5 more Prāṇas apart from the famous 5. The second set of Prāṇas, perhaps play a supportive role to the first set of Prāṇas to work properly. In the second set, the 1st Prāṇa called Nāga (नाग) (perhaps it is in the shape of the hood of a cobra). It is in the throat near the vocal cords and helps us to utter letters. The 2nd one is Kūrma (कूर्म) (perhaps its shape resembles with the tortoise). It helps us to open. Opening the eyelids, mouth, anus, veins, valves and the other inner invisible openings is controlled by it. If it does work, everything gets shut down. The 3rd Prāṇa is Krukara (क्रुकर). It causes sneeze. The 4th one is Devadatta (देवदत्त) which causes yawning. The 5th one is Dhanañjaya (धनञ्जय) that does not leave the body even after death.[8]

The last one causes ballooning of the corpse and decay. It acts like self-decaying and self-scavenging agency provided by the nature in the body. That is why the dead-body decomposes with the self eating bacteria and gets dissolved in the soil.

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6 हृदि प्राणो गुदेऽपानः ..... – *Amarakośa* I-i-63

7 नव वै पुरुषे प्राणाः। नाभिर्दशमी।
– Taittirīya Branch of *Kṛṣṇa Yajurveda* 5/3/2/3

8 वाग्द्वारे नाग आख्यातः कूर्म उन्मीलने स्मृतः। क्रुकराच्च क्षुतं ज्ञेयं, देवदत्ताद्विजृम्भणम्।
न जहाति मृतं वापि सर्वव्यापी धनञ्जयः। – *Amarakośa* I-i-63

Answer 4: Udāna is the navigator. It lives in the 101st of the main veins which heads upwards from the heart. It decides the fate of the life and body, as per the Karma (कर्म), committed. If you commit only Puṇya (पुण्य) (merit) you will be guided to the heaven. If you commit only Pāpa (पाप) (sin) your destiny is hell. If you perform both, you will be born on the earth. So, it is through Udāna the life evacuates the body[9].

Answer 5: The daily rising sun is the external support. Prāṇa, through its upper organs of eyes, nose, ears and mouth establishes link with the sun and receives strength (energy) to maintain the body. The Apāna, with its downward openings creates link with Goddess earth and gets strength to maintain the body. The Vyāna (which is in between the above) connects with Vāyu through navel and maintains the body[10].

Answer 6: Prāṇa (Jīva) is linked with the internal world through Udāna, the bliss. Disappearance of Udāna or bliss is an indication of death. When it pacifies, pulls back the efficacies/ powers of all the organs like ears, eyes [like the tortoise pulling in its front and hind legs along with head] and registers the Karmas (actions) done by them in the mind, so as to create the next birth and decide the fate of the next birth. Udāna instigates the mind to think of such world and birth which is suitable to the actions carried out by the Jīva and the Jīva gets the same world and birth as the mind thinks at the time of death. Thus, world is created internally[11].

A deep study of the answers of Paippalāda reveals the secrets of birth; rather, the journey of the Jīva leaving many leads to the Physiologists.

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9 अथैकयोर्ध्व उदानः पुण्येन पुण्यं लोकं ..... – P.U. 3-7

10 आदित्यो ह वै बाह्यः प्राण – Ibid. 3-8

11 तेजो ह वा उदानः .... यच्चित्तस्तेनैष प्राणमायाति। ....यथा सङ्कल्पितं लोकं नयति। – Ibid. 3-10

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